

LISTING OF CLAIMS

This listing of claims provided below will replace all prior versions and listings of claims in the application.

Claims 1-21. (Canceled).

- ① 22. (Currently Amended) A method of determining whether newly synthesized target antibody is present in a body fluid sample in response to an immunogen comprising: The method as claimed in claim 21 comprising the steps of:
- (i) ~~(ii)~~ lysing said lymphocytes whereby to release said target antibodies or parts thereof from said lymphocytes, wherein said lymphocytes are obtained obtaining from a whole blood the sample containing lymphocytes from a subject suspected of undergoing an immune response whereby the lymphocytes are in acute phase of antibody synthesis; and
- (ii) ~~(iii)~~ detecting said released target antibodies or parts thereof from the lysed lymphocytes, whereby to determine the presence of newly synthesized target antibody from the lymphocytes indicates whether newly synthesized antibodies are in the body fluid sample.
23. (Canceled).
- ② 24. (Currently Amended) The method of ~~claim 21~~ ^{claim ①} 22, wherein said blood sample is peripheral blood.
- ③ 25. (Currently Amended) The method as claimed in ^{claim ①} ~~claim 21 or 22~~, wherein the sample is not incubated to promote synthesis and/or secretion of antibodies prior to the method.
- ④ 26. (Currently Amended) The method as claimed in ~~claim 21 or 22~~ ^{claim ①}, wherein the lymphocytes are lysed by using physical disruption means or cell-disrupting buffers or solutions.

(5) 21. (Currently Amended) The method as claimed in claim 21 or 22, wherein the target antibodies or parts thereof are detected by binding to one or more antigens which recognize said antibodies or parts thereof.

(6) 28. (Currently Amended) The method as claimed in claim 21 or 22, wherein the released target antibodies are detected by means of a solid phase binding assay.

(7) 29. (Previously Presented) The method of claim 28, wherein the solid phase of said solid phase binding assay carries one or more antigens recognized by the target antibody or antibodies or parts thereof to be detected.

30. (Canceled)

8 9 31. (Previously Presented) The method of claim 28, wherein the solid phase of said solid phase binding assay carries one or more antibodies, which recognize the target antibody or target antibodies or parts thereof to be detected.

(12) 32. (Currently Amended) The method as claimed in claim 21 or 22, wherein the method is performed on neonate or infant blood samples for distinguishing between newly synthesized antibodies and passively transferred maternal antibodies.

(13) 33. (Currently Amended) The method as claimed in claim 21 or 22, wherein prior to disrupting the lymphocytes, or after disruption but prior to the detection step, said sample is stored at about 4 °C or less.

(14) 34. (Currently Amended) The method as claimed in claim 21 or 22, wherein said blood sample for preparing lymphocytes for use in the method, has a volume of less than 1 ml.

~~15~~ 35. (Currently Amended) The method as claimed in claim ~~21~~ or ~~22~~, wherein the lymphocytes are directly isolated from said blood sample.

~~16~~ 36. (Currently Amended) The method as claimed in claim ~~21~~ or ~~22~~, wherein the detecting step is performed by immunoassay.

~~17~~ 37. (Previously Presented) The method of claim ~~36~~, wherein the immunoassay is enzyme linked immunosorbent assay.

~~9~~ ~~10~~ 38. (Previously Presented) The method of claim ~~31~~, wherein one or more antigens, recognized by the target antibodies immobilized on said solid phase, are contacted with said solid phase.

~~10~~ ~~8~~ 39. (Previously Presented) The method of claim ~~29~~ or ~~31~~, wherein one or more antibodies, which recognize target antibodies immobilized on said solid phase, are contacted with said solid phase.

~~18~~ 40. (Currently Amended) The method as claimed in claim ~~21~~ or ~~22~~, wherein the detection step comprises the addition of an enzyme-antibody conjugate or an enzyme-antigen conjugate, and the addition of a soluble substrate, wherein said soluble substrate yields a spectrophotometrically detectable signal.

~~19~~ 41. (Currently Amended) The method as claimed in claim ~~21~~ or ~~22~~, wherein the target antibodies or parts thereof are detected by binding to one or more antigens which recognize said antibodies or parts thereof and wherein said method is additionally performed using a negative control antigen.

(11) ~~42.~~ (Previously Presented) The method of claim ~~28~~⁽⁶⁾, wherein multiple solid phases are employed each bearing a different target antigen, which recognizes a different target antibody.

43-46. (Canceled).

(20) ~~41.~~ (Currently Amended) The method of claim ~~21~~⁽¹⁾ ~~claim 22~~⁽¹⁾ further comprising determining the amount of a newly ~~synthesized~~^{synthesized} target antibody comprising:
comparing said antibody binding to antibody binding in control and/or reference samples, whereby to obtain a determination of the amount of newly synthesized antibody in response to said ~~antigen~~^{immunogen}.

(21) ~~48.~~ (Currently Amended) The method as claimed in claim ~~22~~⁽¹⁾ ~~claim 21~~⁽²⁰⁾ or ~~47~~⁽²⁰⁾, wherein the newly synthesized antibody is synthesized *in vivo*.

(22) ~~49.~~ (Currently Amended) The method as claimed in claim ~~22~~⁽¹⁾ ~~claim 21~~⁽²⁰⁾ or ~~47~~⁽²⁰⁾, wherein the newly synthesized antibody is an antigenically active antibody, which has been produced or synthesized by and within a lymphocyte *in vivo* as part of an ongoing immune response.